AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 10/822,145

Attorney Docket No.: Q80815

REMARKS

Status of the Application

Claims 1-20 are pending in the application and have been examined. With this Amendment, Applicant amends claims 3, 5, 11 and 13-16, and cancels claim 12. After entry of this Amendment, claims 1-11 and 13-20 will be pending in the application.

Amendments to the Specification

Applicant has amended the specification and the Abstract to correct a typographical error.

Applicant respectfully submits that no new matter has been added.

Claim Rejections

Claims 1, 2 and 8-10 — 35 U.S.C. § 102(e)

Claims 1, 2 and 8-10 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Pat. Pub. No. 2004/0170186 to Shao *et al.* ("Shao"). Applicant traverses this rejection.

Addressing claim 1, Shao does not disclose or suggest at least wherein if the packet of the classified stream is a first packet, storing the packet in a first stream queue, and if the packet of the classified stream is a subsequent packet, storing the packet in a second stream queue, as recited in the claim.

In the Response to Arguments section of the Office Action, the Examiner states that all of the packets of Shao are shaped before being queued and then differentiated by modulation and coding scheme (MCS) within the same class and *queued correspondingly using a delay factor* based on packet length. See Office Action, page 5, and Shao, paragraphs [0043], [0054],

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q80815

U.S. Application No.: 10/822,145

[0063], and [0079]. Based on the above, the Examiner further asserts that Shao inherently discloses queuing of subsequent packets to a second stream queue using a delay factor based on packet length. Applicant respectfully disagrees.

As disclosed by Shao, traffic streams are classified according to quality of service parameters, for example delay and packet loss, before being queued (paragraphs [0043-0044]). As noted by the Examiner, Shao's packets are queued correspondingly using a delay factor based on packet length. On the other hand, as recited in the claim, a stream is classified according to at least one of a data rate and a length of a packet. Packets in the classified stream are queued based on whether the packets are first packets or subsequent packets. As described in Applicant's specification, a first packet may be a packet processed for the first time, a first packet processed after a system restart, or a new packet when there is no packet waiting for scheduling. See specification, page 7. Shao, however, does not disclose or suggest queuing the packets in a classified stream based on whether the packet is a first packet or a subsequent packet, as required by the claim.

Further, in the Advisory Action, the Examiner alleges that Shao discloses that packet streams are classified and queued using a delay factor based on packet length. Therefore, since the reference discloses that delay is calculated based on packet length, Applicant respectfully disagrees with the Examiner's reasoning.

As disclosed by the reference, packet length is used in conjunction with bandwidth to calculate delay. However, since bandwidth as well as packet length may vary, a packet of a given length may be classified differently as a result of a different bandwidth. Therefore, Shao's

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U.S. Application No.: 10/822,145

Attorney Docket No.: Q80815

packet classification is determined based on delay, not packet length. Also, neither packet length nor delay is determinative of whether a packet is a first packet or a second packet. Thus, contrary to the Examiner's allegation, Shao does not disclose or suggest queuing the packets in a classified stream based on whether the packet is a first packet or a subsequent packet.

Further, the mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency. See MPEP § 2112 (IV). Therefore, as noted above, a first packet is not inherently queued differently than a subsequent packet based on the disclosure of Shao. Accordingly, Shao does not disclose or suggest at least wherein if the packet of the classified stream is a first packet, storing the packet in a first stream queue, and if the packet of the classified stream is a subsequent packet, storing the packet in a second stream queue, as recited in the claim.

Accordingly, claim 1 is patentable over Shao. Claims 2 and 8-10 are patentable at least by virtue of their dependence from claim 1.

Claims 4, 11, 12 and 18-20 — 35 U.S.C. § 103(a)

Claims 4, 11, 12 and 18-20 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shao in view of U.S. Pat. No. 6,693,913 to Chiussi *et al.* ("Chiussi"). Claim 12 has been canceled without prejudice or disclaimer, thereby rendering its rejection moot. Applicant traverses the rejection of claims 4, 11 and 18-20.

Addressing claim 11, the combination of Shao and Chiussi does not disclose or suggest at least wherein if the packet of the classified stream is a first packet, storing the packet in a first stream queue, and if the packet of the classified stream is a subsequent packet, storing the packet

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q80815

U.S. Application No.: 10/822,145

in a second stream queue, as set forth in the claim. As established above, Shao does not disclose or suggest at least these features. Chiussi does not cure the deficiencies of Shao.

The Examiner relies on Chiussi to allegedly disclose a smallest eligible virtual finish time first (SEFF) strategy. However, even if Chiussi provides such disclosure, the reference does not disclose or suggest the features missing in Shao. Therefore, even if one of ordinary skill in the art at the time the invention was made had been motivated to combine the references as attempted by the Examiner, the combination still would not have resulted in the features claimed by Applicant.

Accordingly, claim 11 is patentable over the combination of Shao and Chiussi. Claims 12 and 18-20 are patentable at least by virtue of their dependence from claims 11. Claim 4 is patentable at least by virtue of its dependence from claim 1.

Allowable Subject Matter

Applicant thanks the Examiner for the indication that claims 3, 5-7 and 13-17 contain allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant has rewritten claims 3, 5 and 13-16 in independent form as suggested by the Examiner and respectfully submits that these claims are patentable over the prior art. Claims 6 and 7, which depend from claim 5, and claim 17, which depends from claim 16, are patentable at least by virtue of their dependence.

17

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 10/822,145

Attorney Docket No.: Q80815

Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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